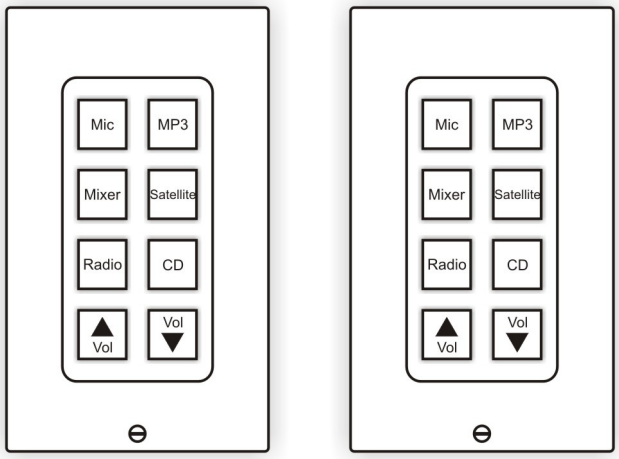


AUDISEY REM-PACK-3

BY INTELIX

Table of Contents

Overview

Designed for the Intelix Audisey Athena matrix mixer/amplifier, Intelix Remote Control Packs are complete, pre-programmed remote control systems designed for quick, easy setup and operation.

Sold in packages, Intelix Remote Control Packs are available in packages of 3, 4, 5, 6, 8, 12, and 16 remote controls. Each package includes all of the wiring accessories, IR to serial control modules, and push-button remote controls needed for 2-16 independent zones.

Each remote control mounts into a standard single-gang wallbox and features visual and auditory feedback, multiple label options, and password protection.

Design with Intelix and Design with Intelligence.

REM-PACK-3 Contents

Before installing the Intelix REM-PACK-3, please ensure you received all the necessary components. These components may be located in several packages.

- (3) CB-1000 remote controls
- (1) ION-LT IR/serial controller
- (3) CW-TB wiring blocks
- (4) 12VDC power supplies
- (3) 24-sheet CB-1000 button caps
- (3) single gang decora plates
- (3) 6’ IR cables
- (3) IR breakout cables
- (1) Athena Designer Software CD

Wiring the Intelix REM-PACK-3

Determining the Cabling Schematic

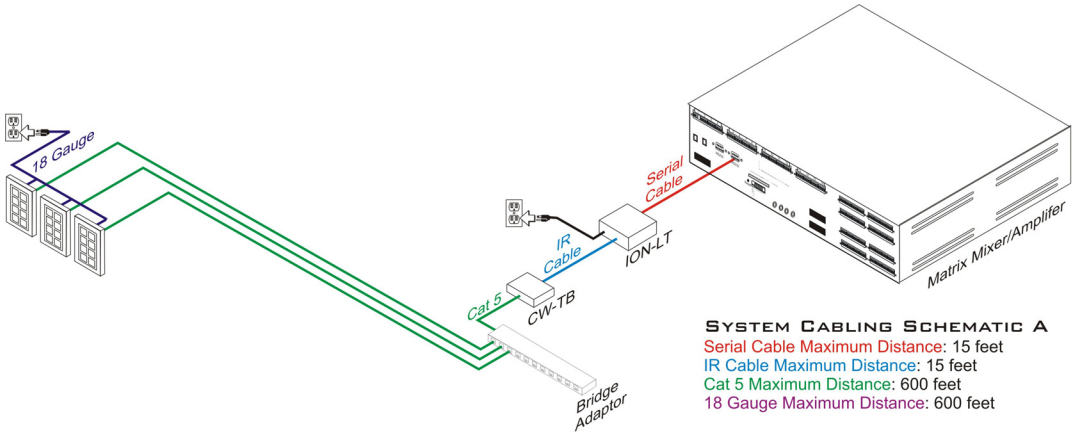
Before installing the Intelix REM-PACK-3, determine which cabling schematic best fits your application.

Cabling Schematic A (pictured below; top) allows the remote controls to be located up to 630 feet from the controlled hardware (typically an Intelix Audisey Athena matrix mixer/amplifier).

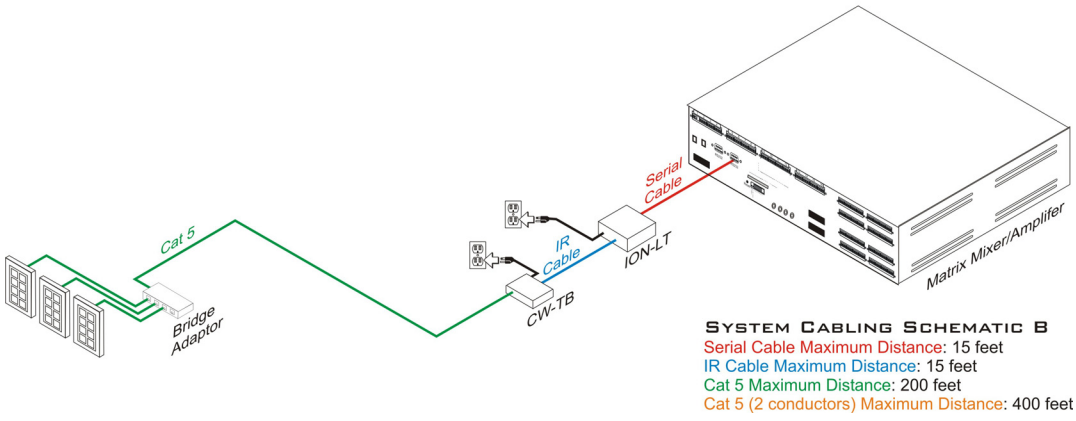
Cabling Schematic B (pictured below; bottom) allows the remote controls to be located up to 230 feet from the controlled hardware.

The main advantage of wiring according to Cabling Schematic A is system distance—because only data is being transmitted over the twisted pair cable, the remotes may be located up to 630 feet from the controlled hardware. The main disadvantage is having to run both twisted pair cabling (for control) and 18 gauge cabling (for power).

The main advantage of wiring according to Cabling Schematic B is cabling ease—both power and data are being sent over a single twisted pair cable. The main disadvantage is distance—you are limited to 230 feet of distance between the remotes and controlled hardware.



System Cabling Schematic A
Serial Cable Maximum Distance: 15 feet
IR Cable Maximum Distance: 15 feet
Cat 5 Maximum Distance: 600 feet
18 Gauge Maximum Distance: 600 feet



System Cabling Schematic B
Serial Cable Maximum Distance: 15 feet
IR Cable Maximum Distance: 15 feet
Cat 5 Maximum Distance: 200 feet
Cat 5 (2 conductors) Maximum Distance: 400 feet

Wiring with Twisted Pair and 18 Gauge Cable (Cabling Schematic A)

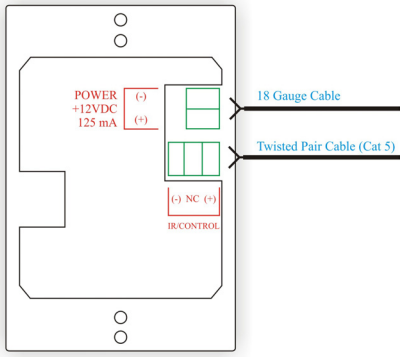
When wiring with twisted pair cable and 18 gauge cable, please follow the steps below.

Wiring the Physical Remotes

The REM-PACK-3 may be wired in several different configurations. The following steps detail the most common configuration.

1) Open the REM-PACK-3 package(s) and verify you have all of the components listed on page 3.
2) Noting the number of the CB-1000 remote control (each remote control's package is labeled 1, 2, or 3), remove the remote from its packaging. You will need to know the number of each CB-1000 for programming.
3) Determine the single-gang electrical wallbox the CB-1000 will be installed in. Verify twisted pair and 18 gauge cable are present. Multiple runs of twisted pair and 18 gauge cable may be present if IR/control and power are to be daisy-chained.
4) Terminate one pair (two conductors) of the twisted pair cable to the three conductor phoenix-style wiring block. One conductor should be in the far left (-) slot and one conductor should be in the far right (+) slot. Connect the wiring block to the physical CB-1000.
5) Terminate two conductors of the 18 gauge cable to the two conductor phoenix-style wiring block. One conductor should be in the top (-) slot and one conductor should be in the bottom (+) slot. Connect the wiring block to the physical remote. (Multiple 18 gauge cables may be terminated to the phoenix-style wiring block if the remote controls are to be daisy-chained).

   Note: The CB-1000 is powered by a DC power supply. Polarity is critical at the power supply and all the CB-1000 locations.

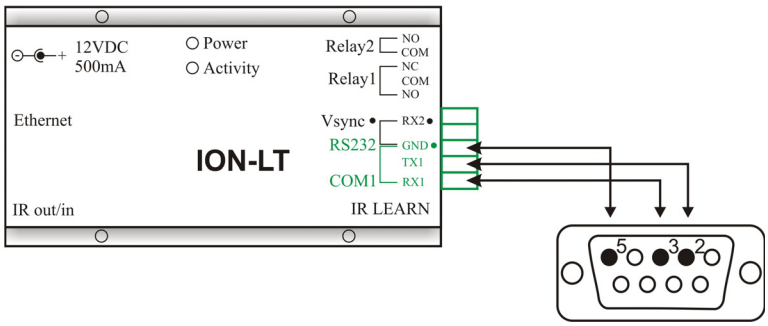


6) If remote programming and function have been determined, select and replace the remote control's button caps (see page 17).
7) Secure the remote control to the single-gang electrical wallbox with the two included mounting screws.
8) Secure a decora plate over the remote control. Your remote control is now installed.
9) Repeat steps 2-8 for each subsequent remote control.

Connecting Data

The following steps detail connecting data to the remote controls once they are wired and mounted in the electrical wallbox.

1) Open the ION-LT IR/serial controller packaging and mount the ION-LT in a permanent location within 15 feet of the Intelix Audisey Athena matrix mixer/amplifier or other serially controlled hardware.
2) Connect the ION-LT to the controlled hardware with a prepared serial cable (purchased separately).
   - Pin 2 on the serial cable (RX) should be connected to the phoenix-style style connecter conductor 2 (TX) on the ION-LT.
   - Pin 3 on the serial cable (TX) should be connected to the phoenix-style style connecter conductor 1 (RX) on the ION-LT.
   - Pin 5 on the serial cable (GND) should be connected to the phoenix-style style connecter conductor 3 (GND) on the ION-LT.

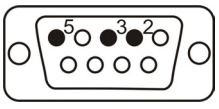


3) Mount a CW-TB wiring block (found in each of the CB-1000 remote control packages) in a permanent location within 15 feet of the ION-LT.

Preparing the Serial Cable

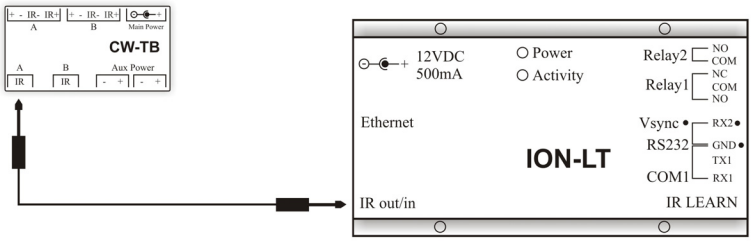
The ION-LT transmits serial control signals via a three conductor phoenix-style wiring block. To connect to the most serially controlled hardware (including the Intelix Audisey Athena), you must create a custom cable with a three conductor wiring block on one end and a standard 9-pin RS232 connector on the other end. To create this cable, follow the steps below:

1) Obtain a three conductor cable (15' or less total length) and a 9-pin serial (RS232) connector (pictured below).

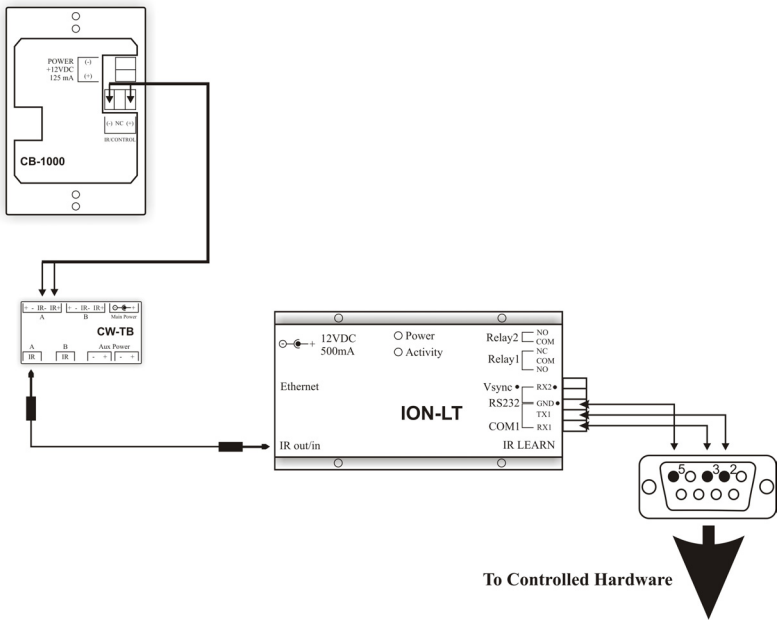


2) Solder the cables conductors to pins 2, 3, and 5. You should now have a cable with a serial connector on one end and three bare wires on the other. The bare wires will terminate into the phoenix-style wiring block on the ION-LT.

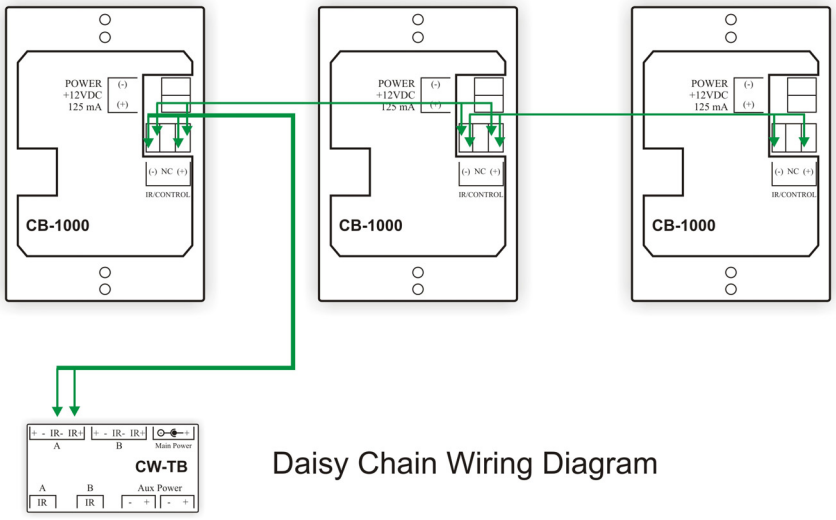
4) Connect the CW-TB to the ION-LT with an IR (1/8” stereo mini) cable.



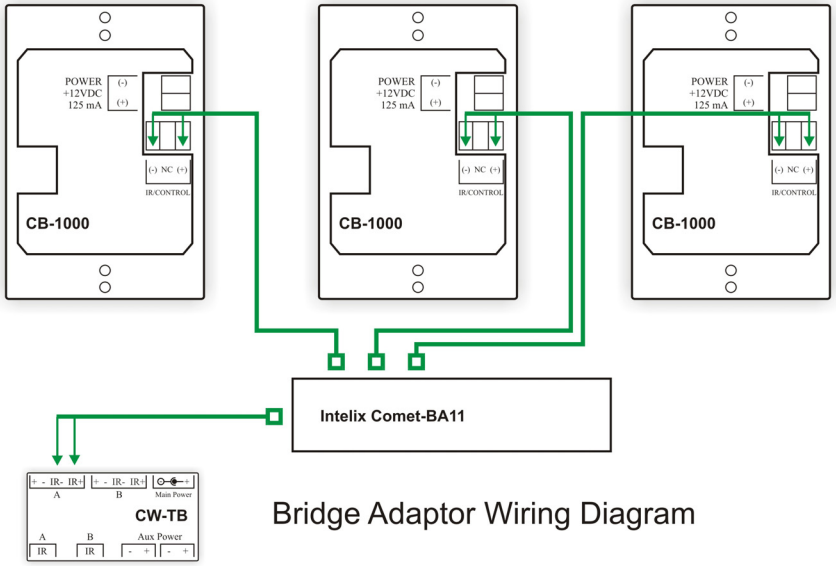
5) Determine which twisted pair cable is connected to the CB-1000 remote controls. Using the cable, connect the (+) conductor on the remote to the (+) conductor on the CW-TB. Connect the (-) conductor on the remote to the (-) conductor on the CW-TB. Your system should now be fully connected: the CB-1000 remote controls should be connected to the CW-TB, the CW-TB should be connected to the ION-LT, and the ION-LT should be connected to the controlled hardware.



6) *Optional:* The CB-1000 remote controls may be chained in various manners. In most applications, an RJ45 bridge adaptor, such as the Intelix Comet-BA11 or Comet-BA4, is used (sold separately). The bridge adaptor splits an RJ45-terminated cable to multiple outputs and is installed between the CW-TB and the CB-1000 remote controls. Alternatively, multiple conductors of twisted pair cable may be terminated to each remote, effectively daisy-chaining them.



Daisy Chain Wiring Diagram



Bridge Adaptor Wiring Diagram

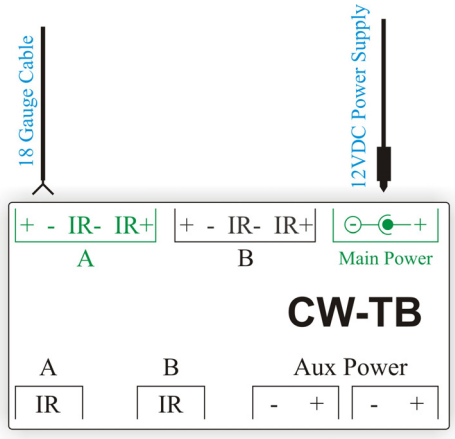
Connecting Power

The following steps detail connecting power to the REM-PACK-3 system.

1) Using a CW-TB from one of the CB-1000 remote control packages, connect the two conductor 18 gauge cable to the four conductor phoenix-style wiring block. The conductor connected to the (-) block on the remote controls should be connected to the (-) block on the CW-TB. The conductor connected to the (+) block on the remote controls should be connected to the (+) block on the CW-TB. Connect the wiring block to the physical CW-TB.

> **Warning**
> Do not reverse power on the CW-TB and CB-1000 remote controls. The system does not provide diode protection.

2) Connect a 12VDC power supply to the *Main Power* input on the CW-TB.



3) Plug in the power supply.
4) The remote controls are now powered and should illuminate.
5) Next, connect a 12VDC power supply to the ION-LT located near the controlled hardware.
6) Plug in the power supply.
7) The ION-LT is now powered and the power LED should illuminate.

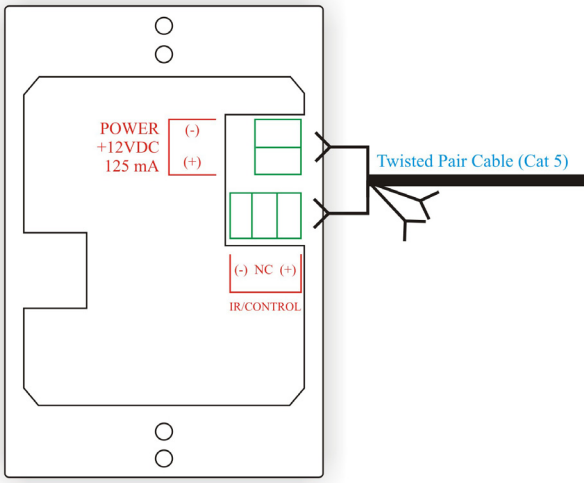
Wiring with Twisted Pair Cable (Cabling Schematic B)

When wiring with only twisted pair cable, please follow the steps below.

Wiring the Physical Remotes

The REM-PACK-3 may be wired in several different configurations. The following steps detail the most common configuration.

1) Open the REM-PACK-3 package(s) and verify you have all of the components listed on page 3.
2) Noting the number of the CB-1000 remote control (each remote control's package is labeled 1, 2, or 3), remove the remote from its packaging. You will need to know the number of each CB-1000 for programming.
3) Determine the single-gang electrical wallbox the CB-1000 will be installed in. Verify twisted pair cable is present.
4) Terminate one pair (two conductors) of the twisted pair cable to the three conductor phoenix-style wiring block. One conductor should be in the far left (-) slot and one conductor should be in the far right (+) slot. Connect the wiring block to the physical CB-1000.
5) Terminate a second pair (two conductors) of the twisted pair cable to the two conductor phoenix-style wiring block. One conductor should be in the top (-) slot and one conductor should be in the bottom (+) slot. Connect the wiring block to the physical CB-1000.
6) Two pairs (four conductors) of the twisted pair cable will be unused; twist these conductors around the cable housing.

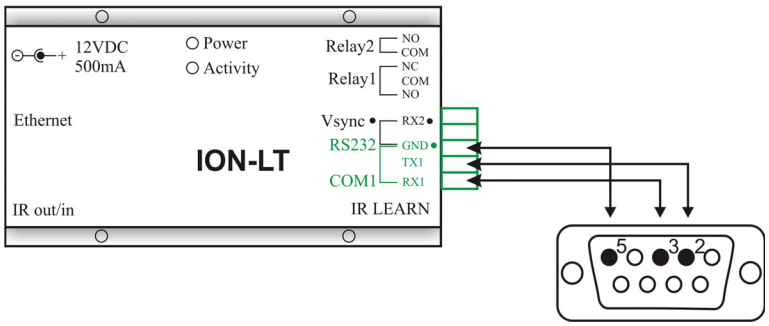


7) If remote programming and function have been determined, select and replace the remote control's button caps (see page 17).
8) Secure the remote control to the single-gang electrical wallbox with the two included mounting screws.
9) Secure a decora plate over the CB-1000. Your remote control is now installed.
10) Repeat steps 2-8 for each subsequent remote control.

Connecting Data

The following steps detail connecting data to the remote controls once they are wired and mounted in the electrical wallbox.

1) Open the ION-LT IR/serial controller packaging and mount the ION-LT in a permanent location within 15 feet of the Intelix Audisey Athena matrix mixer/amplifier or other serially controlled hardware.
2) Connect the ION-LT to the controlled hardware with a prepared serial cable (purchased separately).
    - Pin 2 on the serial cable (RX) should be connected to the phoenix-style style connecter conductor 2 (TX) on the ION-LT.
    - Pin 3 on the serial cable (TX) should be connected to the phoenix-style style connecter conductor 1 (RX) on the ION-LT.
    - Pin 5 on the serial cable (GND) should be connected to the phoenix-style style connecter conductor 3 (GND) on the ION-LT.

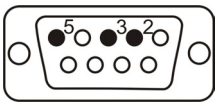


3) Mount a CW-TB wiring block (found in each of the CB-1000 remote control packages) in a permanent location within 15 feet of the ION-LT.

Preparing the Serial Cable

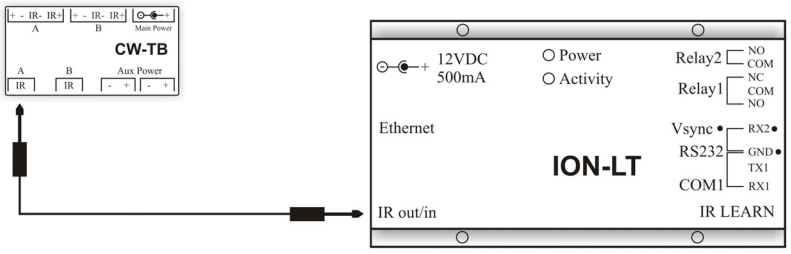
The ION-LT transmits serial control signals via a three conductor phoenix-style wiring block. To connect to the most serially controlled hardware (including the Intelix Audisey Athena), you must create a custom cable with a three conductor wiring block on one end and a standard 9-pin RS232 connector on the other end. To create this cable, follow the steps below:

3) Obtain a three conductor cable (15' or less total length) and a 9-pin serial (RS232) connector (pictured below).



4) Solder the cables conductors to pins 2, 3, and 5. You should now have a cable with a serial connector on one end and three bare wires on the other. The bare wires will terminate into the phoenix-style wiring block on the ION-LT.

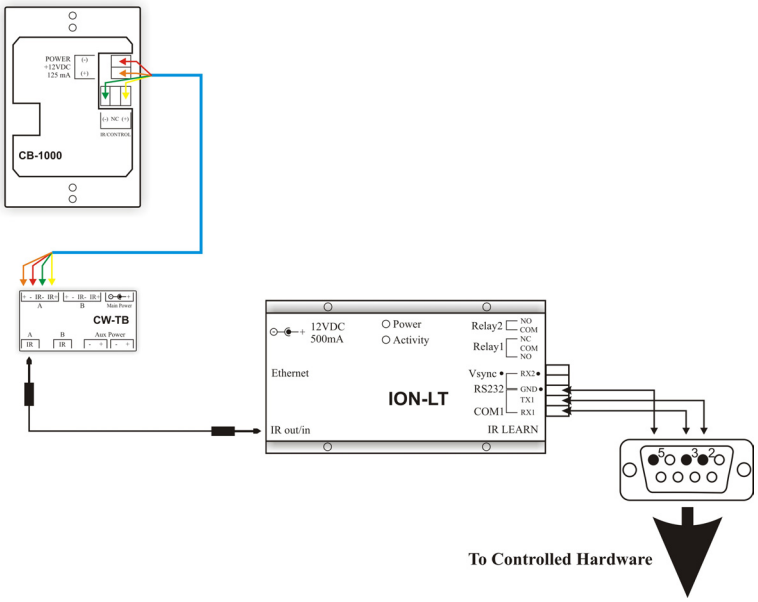
7) Connect the CW-TB to the ION-LT with an IR (1/8” stereo mini) cable.



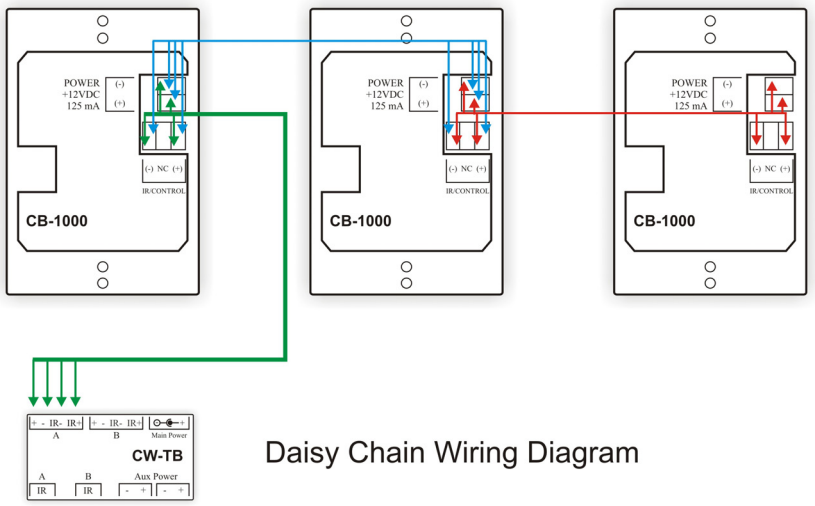
4) Determine which twisted pair cable is connected to the CB-1000 remote controls. It is imperative you determine which conductors are terminated to the remote control. In most twisted pair cables, these conductors will be color-coded. Using the cable:

i. Connect the (+) power conductor on the CB-1000 remote to the (+) power conductor on the CW-TB.
ii. Connect the (-) power conductor on the CB-1000 remote to the (-) power conductor on the CW-TB.
iii. Connect the (+) IR conductor on the CB-1000 remote to the (+) IR conductor on the CW-TB.
iv. Connect the (-) IR conductor on the CB-1000 remote to the (-) IR conductor on the CW-TB.

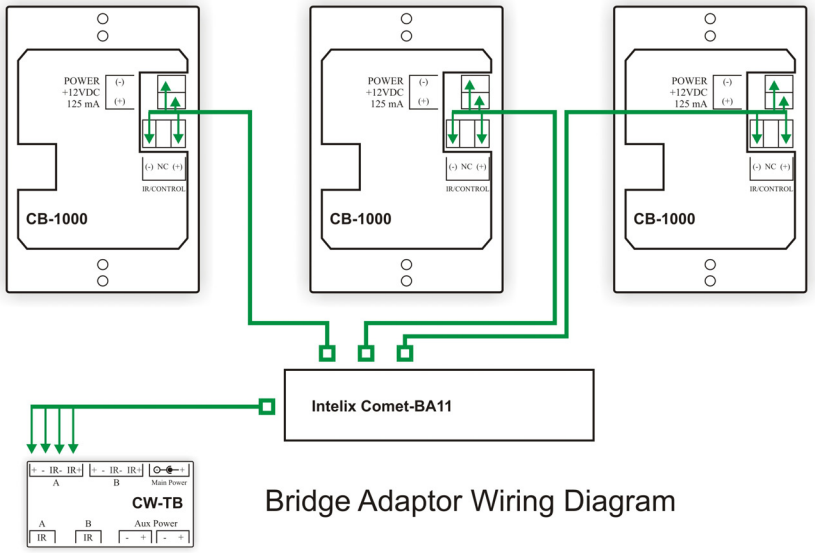
Your system should now be fully connected: the CB-1000 remote controls should be connected to the CW-TB, the CW-TB should be connected to the ION-LT, and the ION-LT should be connected to the controlled hardware.



5) *Optional:* The CB-1000 remote controls may be chained in various manners. In most applications, an RJ45 bridge adaptor, such as the Intelix Comet-BA11 or Comet-BA4, is used (sold separately). The bridge adaptor splits an RJ45-terminated cable to multiple outputs and is installed between the CW-TB and the CB-1000 remote controls. Alternatively, multiple conductors of twisted pair cable may be terminated to each remote, effectively daisy-chaining them.



Daisy Chain Wiring Diagram



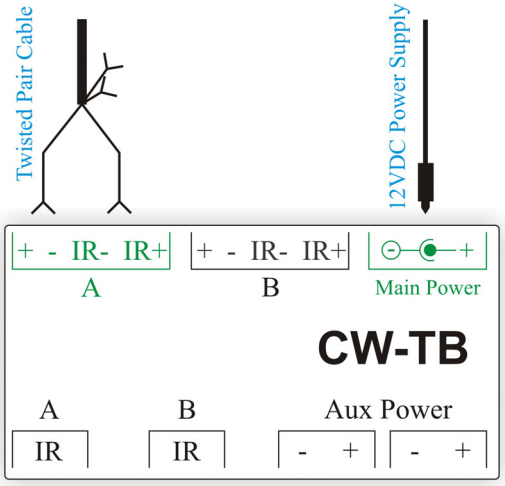
Bridge Adaptor Wiring Diagram

Connecting Power

The following steps detail connecting power to the REM-PACK-3 system.

> **Warning**
> Do not reverse power on the CW-TB and remote controls. The system does not provide diode protection.

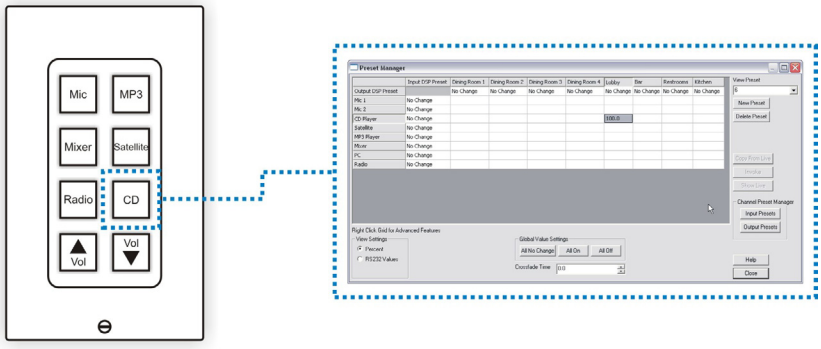
1) Connect a 12VDC power supply to the *Main Power* input on the CW-TB.



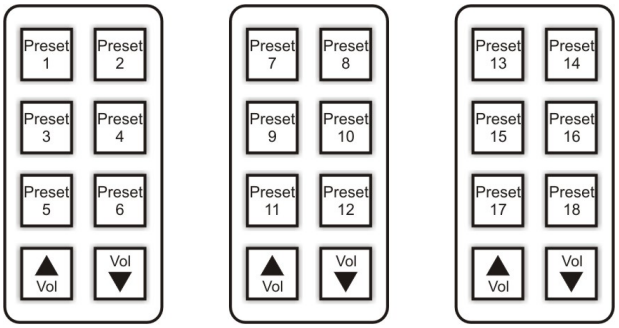
2) Plug in the power supply.
3) The remote controls are now powered and should illuminate.
4) Next, connect a 12VDC power supply to the ION-LT located near the controlled hardware.
5) Plug in the power supply.
6) The ION-LT is now powered and the power LED should illuminate.

Programming the REM-PACK-3 Remotes

Intelix REM-PACK-3 remotes are tied to Intelix Audisey Athena Designer Software presets. To alter the function of each remote's buttons, you must alter the preset in the Athena Designer Software.



Begin by determining which remote and which button you are working with. The remotes should have arrived pre-labeled as remote 1, remote 2, and remote 3. On each eight button remote control, the top six buttons correspond to a virtual preset in the Athena Designer Software. The bottom two buttons toggle volume control on one of the Athena's audio outputs (remote 1 controls output 1, remote 2 controls output 2, etc.).



Remote 1 Programming | **Remote 2 Programming** | **Remote 3 Programming**

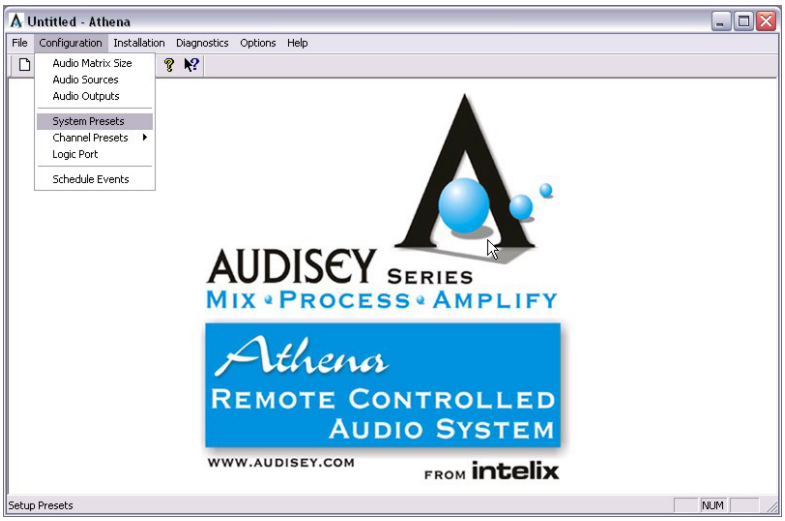
Installing Athena Designer Software

Athena Designer Software is located on the *Athena Designer Software CD*, as well as a free download from www.intelix.com. In order to install the Athena Software, please follow the steps below.

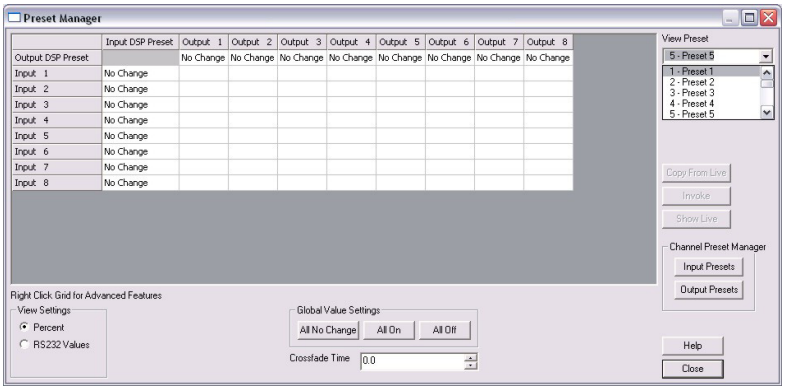
1) Insert the Athena Designer Software CD into the computer's CD-ROM drive.
2) The CD should automatically start and the Athena Autorun Wizard window will initiate. If this does not occur, manually select your computer's CD-ROM drive and open the *Autorun.exe* file.
3) Select the program(s) you wish to install and follow the Installation Wizard.

To alter the button's programming, follow the steps below:

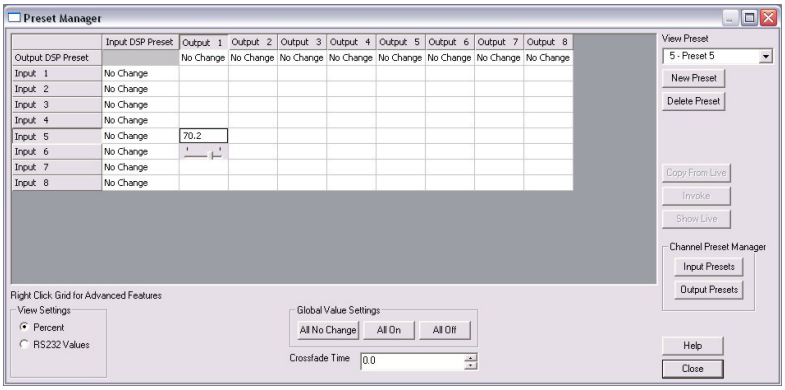
1) Open the Audisey Athena Designer Software.
2) Connect your computer to the physical Audisey Athena matrix mixer/amplifier (for assistance, see *Establishing Connection with the Matrix* on page 18).
3) From the main menu, select the *Configuration* dropdown and *System Presets.*



4) In the *Preset Manager* screen, select which preset you wish to alter in the *View Preset* dropdown. Note that there may be a short delay while the software and physical hardware toggle settings.



5) Make your desired changes to the preset. In most installations, remote control 1 will be tied to output 1 (zone 1), remote control 2 will be tied to output 2 (zone 2), etc.



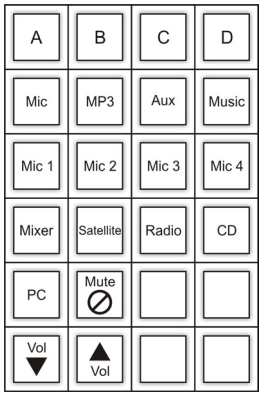
6) Repeat step 5 for each button on each remote you wish to configure. When finished, select *Close*. You have now finished programming the REM-PACK-3's functionality.

Note: Before exiting the software, Intelix recommends saving your file.

Customizing the Physical Remote Control Buttons

The physical remote controls may be customized based on your Athena preset programming. To customize, follow the steps below:

4) Unscrew the decora faceplate.
5) Remove the white plastic button holder by squeezing the two white tabs on the back of the circuit board.
6) Once the white plastic holder has been removed, the buttons should be loose and removable by hand.
7) Replace the buttons with the desired buttons from the sheet of 24.
8) Replace the white plastic holder over the new buttons.
9) Replace the decora faceplate and screws.

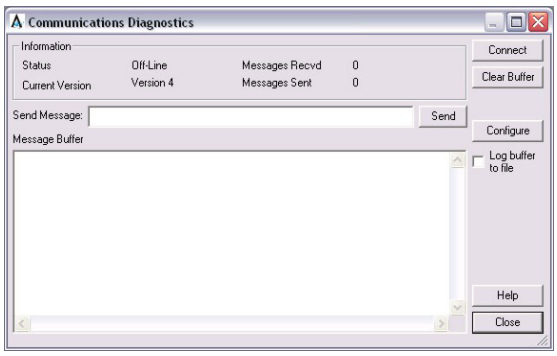


Intelix Remote Control Labeling Options

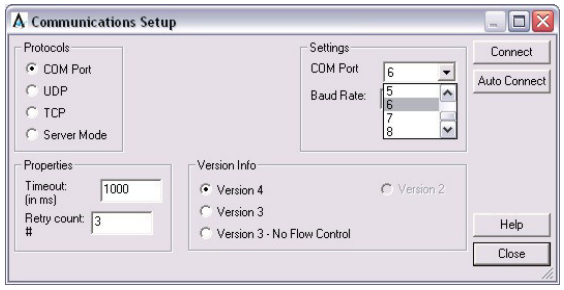
Establishing Communication with the Matrix

In order to integrate your REM-PACK-3 with an Audisey Athena matrix mixer/amplifier, you must connect your computer to the physical matrix. Athena connection options include: two rear panel serial ports, one front panel USB port, and one rear panel TCP/IP Ethernet port. When connecting via USB, you must first install the Athena USB driver (located on the Athena Designer Software CD or as a free download online).

1) Verify your computer is connected to the matrix via a serial cable, cross-over Ethernet cable, or USB cable (see above).
2) Verify your computer has Athena Designer Software installed.
3) Open Athena Designer Software.
4) From the main menu, select the *Diagnostics* dropdown and *Communication Diagnostics.* The *Communications Diagnostics* screen will open.



5) Select *Connect.* Messaging should appear in the *Message Buffer* window. You are now connected to the matrix. If messaging does not appear, select *Configure.* This will open the *Communications Setup* screen.



6) If connecting via TCP/IP, select *TCP* from the *Protocols* section of the *Communications Setup* screen. Select *Connect.* You are now connected to the matrix.
7) If connecting via USB or one of the two serial ports, select *COM Port* from the *Protocols* section of the *Communications Setup* screen. Select *Connect.*
8) Messaging should now appear in the *Communications Diagnostics Screen.* If messaging does not appear, select a different COM port from the *COM port* dropdown menu in the *Communications Setup* screen. Most computers connect via COM port 4, 5, or 6. Select *Connect.* Depending on your computer's processing speed, you may need to toggle different *Baud Rates.*

Technical Specifications

General

ION-LT Dimensions	5.10”H x 2.50”W x 1.10”D
CW-TB Dimensions	1.75”H x 2.00”W x 0.50”D
CB-1000 Dimensions	4.25”H x 2.38”W x 1.25”D
CB-1000 Form Factor	Single-gang decora
Regulatory	UL, RoHS
CB-1000 Feedback	Audible button click; button backlighting
CB-1000 Security	Built-in passcode
Power Supplies	12VDC
CB-1000 Max Power Consumption	100 mA
ION-LT Max Power Consumption	285 mA
CB-1000 Current Limiting Resistor	360 Ohm / 8 mA drive
Shipping Weight	16 lbs.
Warranty	2 years
Ordering Information	REM-PACK-3

Troubleshooting

For additional information on installing and programming the Audisey Athena matrix mixer/amplifier, please consult the Audisey Installation and User Manual.

Should you have questions or require assistance while installing the REM-PACK-3, please contact your authorized Intelix reseller or Intelix directly at 866-4-MATMIX.

Warranty

Intelix warrants to the original purchaser of new and B-stock products that the product will be free from defects in material and workmanship for a period of 2 years from the date of purchase from an authorized Intelix reseller, subject to the terms and conditions set forth below.

All Intelix products are guaranteed against malfunction due to defects in materials or workmanship for two years after date of purchase. If a malfunction does occur during the specified period, the defective product will be repaired or replaced at Intelix's option without charge. As a condition to receiving the benefits of this warranty, you must provide Intelix with documentation that establishes you were the original purchaser of the Intelix products. If you are not the original purchaser, the Intelix equipment must be returned to the original purchaser or another authorized Intelix reseller accompanied by dated documentation of proof of purchase. Please contact Intelix for a list of authorized resellers.

This warranty does not cover: 1) Malfunction resulting from use of the product other than as specified in the user manual; 2) Installation specific wiring; 3) Malfunction resulting from abuse or misuse of the product; 4) Exterior chassis appearance; 5) Malfunction occurring after repairs have been made by anyone other than Intelix or any of its authorized service representatives; 6) Acts of nature; 7) Optional software upgrades or updates.

This warranty will be void if the product's serial number or quality control sticker has been removed or defaced, or if the product has been altered, subjected to damage or abuse, repaired by any person not authorized by Intelix to make repairs, or installed in any manner that does not comply with Intelix's recommendations.

This warranty is in lieu of all other warranties, express or implied. Intelix disclaims all other warranties, express or implied, including, but not limited to, implied warranties of merchantability and fitness for a particular purpose.

No agent or reseller of Intelix is authorized to modify this warranty or to make additional warranties on behalf of Intelix. Statements, representations or warranties made by any party other than Intelix does not constitute warranties by Intelix. Intelix shall not be responsible or liable for any statement, representation or warranty made by any other person or party.

Note: Warranty Terms and Conditions subject to change and do not apply outside the United States.

Thank you for your purchase.

We appreciate your business. Please contact us with your questions and comments.

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